WHITE-TAILED DEER HUNTERS

by

Arlen W. Todd

and

Robert J. McFetridge



Occasional Paper Number 12
Wildlife Management Division



# MANAGING WHITE-TAILED DEER IN THE 1990'S AND BEYOND: RESULTS OF A SURVEY OF OPINIONS, ATTITUDES AND ACTIVITIES OF ALBERTA'S RESIDENT WHITE-TAILED DEER HUNTERS

by

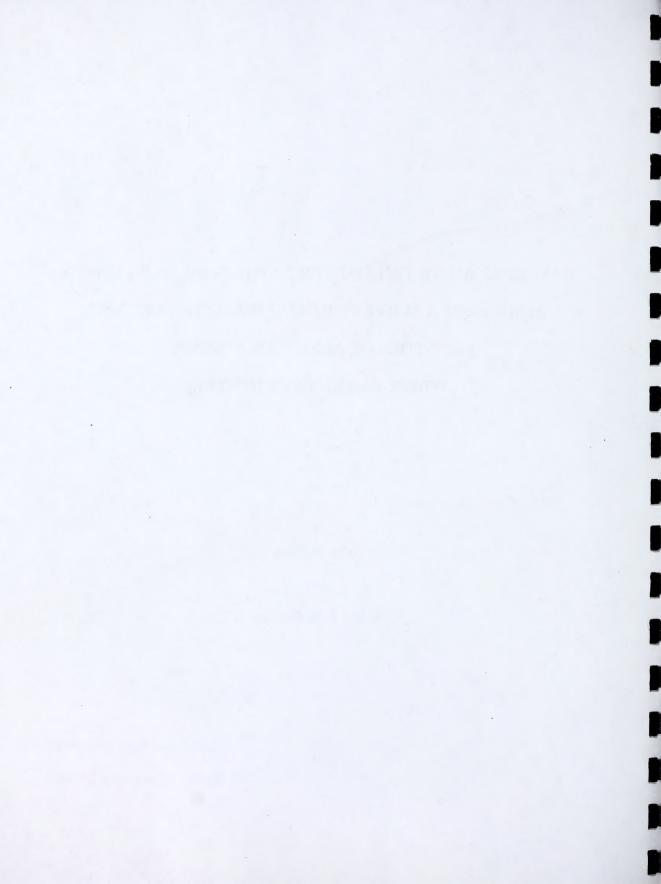
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Fish and Wildlife Services

Edmonton, Alberta

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#### **PREFACE**

This report includes summaries of the opinions held by resident white-tailed deer hunters on various issues that concern white-tail hunting, as well as their preferences in hunting management. Presentation of these opinions and preferences in this report does not necessarily mean that either the authors agree, or that Fish and Wildlife Services agrees with the views and preferences expressed by white-tailed deer hunters.

#### **ACKNOWLEDGMENTS**

We acknowledge the following individuals for their assistance in planning or implementing the survey: E. Bartee, S. Birkholz, H. Carr, D. Drummond, P. Edwards, W. Glasgow, J. Gunson, D. Gunn, D. Kneller, G. Lynch, B. Markham, H. Mende, Y. Pearson, and B. Treichel. A. Turlione and D. Drummond did the word-processing. Lastly, we thank all the white-tailed deer hunters who participated in the survey.

#### INTRODUCTION

Wildlife management agencies are, at times, hampered by the lack of public involvement in formulating management objectives. Large-scale consultation with publics about white-tailed deer management in Alberta has been essentially lacking. Accordingly, in the spring of 1993, Fish and Wildlife Services conducted a large-scale questionnaire survey of white-tailed deer hunters who reside in the province. Objectives of the survey were essentially four-fold:

- To obtain information on activities of white-tailed deer hunters, and approaches to whitetail hunting;
- 2. To assess satisfaction levels of white-tailed deer hunters;
- 3. To measure opinions of white-tail hunters on issues such as poaching, and white-tailed deer population trends;
- 4. To assess preferences of white-tail hunters for various means of managing deer harvests.

This report presents the results of the white-tailed deer hunter survey. Four other surveys of resident big game hunters have been recently completed in Alberta (specific surveys of elk hunters, moose hunters, and mule deer hunters; a general survey of big game licence holders). Results of these other surveys are presented separately (Todd and Lynch 1992a, 1992b; Todd and McFetridge 1993a, 1993b).

#### **METHODS**

A 31-item questionnaire (Appendix) was mailed to 509 white-tailed deer hunters on 13 April 1993. The sample size of hunters was chosen to ensure a margin-of-error of +

5%, 19 out of 20 times, when dealing with a worst-case survey situation (divided 50% in favour of and 50% against), assuming a target population of 65 000 and a response rate of 75%. The sample of resident hunters was drawn (simple random sampling) from holders of 1992 wildlife certificates who were recorded as having purchased any of the 3 types of white-tailed deer hunting licences which were available to residents, namely general white-tailed deer licence ( $\underline{n} = 466$ )<sup>1</sup>, youth white-tailed deer licence ( $\underline{n} = 41$ ), and Strathcona white-tailed deer ( $\underline{n} = 2$ ).

The sample of white-tailed deer hunters included individuals who purchased a white-tail licence but did not actually hunt white-tailed deer. Up to 2 follow-up mailings (April 20, May 2) were made to non-respondents. Otherwise, Dillman's (1978) methods were employed.

Data analyses were performed using SAS (6.04) software and an Olivetti M300 Personal Computer.

#### RESULTS

#### Response Rate and Data-processing Errors

Questionnaires were returned by 407 people, yielding a response rate of 84% after exclusion of non-deliverables ( $\underline{n} = 22$ )<sup>1</sup> and non-usables ( $\underline{n} = 1$ ). One questionnaire was received too late to be included in the analyses for this report.

We checked 1550 data records (50 randomly selected questionnaires with 31 records each) for data-entry errors; the error rate was 0.1%.

<sup>&</sup>lt;sup>1</sup>Number of hunters selected for licence type is shown in parentheses.

## Sex, Age and Experience of White-tailed Deer Hunters, and Participation in White-tail Hunting

Of the 400 respondents who indicated their sex, 382 (95.5%) were male.

Respondents reportedly ranged in age from 14 to 74; the median and mean ages were 36 and 37.5 years, respectively. For 402 respondents, the number of years of experience hunting white-tailed deer (Alberta and elsewhere combined) ranged from 1 to 57 and averaged 13.9 years (median = 11). Of 348 respondents who had started hunting white-tails 3 or more years ago, most (66%) indicated that they purchased a white-tail hunting licence every year, while 25% indicated that they bought a licence more years than not, and 9% selected the "occasionally" category.

#### Approaches to White-tailed Deer Hunting

Weapons used.—Of 400 respondents, 82% hunted exclusively with firearms, whereas 16% used both firearms and bow and arrow and 2% used archery equipment exclusively.

<u>Primary Means of Travel in Hunting Area</u>.--Of 304 usable responses, most (65%) indicated foot travel, followed by four-wheel drive (16%), two-wheel drive highway vehicle (10%), off-highway vehicle (6%), horse (3%) and other (trace).<sup>1</sup>

Aspects of Land Ownership and Permission.--Of 395 respondents, a plurality<sup>2</sup> (42%) indicated that they hunted on privately-owned lands, leased lands and unoccupied crown

 $<sup>^{1}</sup>$ trace = < 0.5%

<sup>&</sup>lt;sup>2</sup>"Plurality" is used here to indicate the numerically largest category, when the category in question is not more than half the total number of all respondents (as opposed to "majority").

lands in roughly equal amounts, 29% hunted mostly on privately-owned lands, 26% hunted mostly on unoccupied crown lands, and 3% hunted mostly on leased public lands.

Of 300 respondents who hunted mostly on privately-owned and/or leased public lands (i.e., answer categories 1, 2 and 3 of question 5, Appendix), 79% indicated that they planned the hunt ahead of time and obtained permission before hand, 19% indicated that they got landowner/leaseholder permission just before going in (if they saw the person in the area) and 2% indicated that they "usually don't bother with permission".

Solitary vs. Group Hunting.--Of 401 respondents, 81% indicated that they "hunted with other deer hunters some or all of the time", whereas 19% "hunted alone at all times".

Motives, Importance of White-tailed Deer Hunting

The distribution of responses to the importance of various motives for white-tailed deer hunting indicates that nature appreciation ("to get outdoors to enjoy nature") is singularly dominant (91% of 398 respondents regarded this motive as either quite important or very important—Table 1). Other relatively important motives for hunting white-tails were "to escape everyday routines, release stress" (77% of 396 respondents regarded as quite or very important) and "to practice hunting skills such as tracking, stalking" (74% of 394 respondents perceived as quite/very important). The least important motives for white-tailed deer hunting were "to obtain a trophy animal", "the satisfaction of bagging an animal", and "to use my hunting equipment" (Table 1).

Bowhunters (full- and part-time combined,  $\underline{n} = 70$ ) differed significantly ( $\underline{P} = 0.02$ ) from other white-tailed deer hunters ( $\underline{n} = 324$ ) in respect to the distribution of responses on one motive for hunting, that being "the challenge of outsmarting a game animal" (Chi-square

Table 1. Percent of respondents to question on motives for hunting white-tailed deer who assessed each motive as not at all important, slightly, quite, and very important.

	% respondents in importance category			
Motive for hunting	Not at all important	Slightly important	Quite important	Very important
To get outdoors to enjoy nature	1	8	29	63
To put meat in the freezer	8	34	29	29
For physical exercise	8	30	38	25
To enjoy solitude	10	21	37	32
To escape everyday routines, release stress	8	15	31	45
For the satisfaction of bagging an animal	35	35	23	7
For companionship of friends or family members	12	23	36	28
To practice outdoor skills (i.e., camping)	16	33	31	20
For the challenge of outsmarting a game animal	. 16	25	35	25
To obtain a trophy animal	44	30	17	9
To use my hunting equipment	33	35	24	8
To practice hunting skills (e.g., tracking, stalking)	6	20	44	30

= 10.02, 3 d.f.). To illustrate, 74% of bowhunters indicated that motive was quite or very important, as compared to 56% of other hunters who used firearms exclusively.

White-tailed deer hunting was quite important to most respondents. Of 401 respondents, 58% indicated that they would miss it quite a lot (if they could not go hunting next year, or if the season closed), whereas 23% indicated that they would miss it more than any other activity or interest. Only 17% of respondents indicated that they would miss white-tail hunting a little, and 2% chose "I would not miss it at all".

The importance of white-tailed deer hunting differed among bowhunters (part-time and full-time combined due to very small sample size for the latter) and hunters who exclusively used firearms (Chi-square = 12.66, 3 d.f.,  $\underline{P}$  = 0.006). To illustrate, 89% of 71 bowhunters chose the 2 categories of greatest importance (see question 2 of Appendix), as compared to 79% of 329 other hunters.

#### Hunter Satisfaction Levels and Determinants of Satisfaction

This section summarizes the various measures of white-tailed deer hunter satisfaction. It also presents the findings on a number of questionnaire items which are either known or surmised to affect hunter satisfaction. Findings on the determinants of deer hunter satisfaction are preliminary at this time.

<u>Longer-term Satisfaction.</u>—Of 349 respondents, the vast majority were either neutral (neither satisfied nor dissatisfied, 105 respondents or 30%) or satisfied (slightly = 126 or 36%, strongly = 81 or 23%), only 37 respondents (11%) were dissatisfied (strongly = 9 or 3%, slightly = 28 or 8%).

Longer-term satisfaction varied with the frequency of hunting (question 20 of

Appendix). To illustrate, of 316 respondents who purchased white-tail hunting licences every year or more years than not, 61% were satisfied, 28% neutral and 11% dissatisfied, as compared to 41%, 50% and 9%, respectively, of 32 respondents who seldomly or occasionally purchased licences (Chi-square = 25.18, 12 d.f.,  $\underline{P}$  = 0.014).

Satisfaction in 1992.--Of 395 respondents, a majority was satisfied (strongly = 111 or 28%, slightly = 129 or 33%), whereas 28% were neutral (109 respondents) and 12% dissatisfied (strongly = 19 respondents or 5%, slightly = 27 respondents or 7%). Bowhunters (part-time and full-time combined) were more likely to be satisfied than respondents who hunted only with firearms (Chi-square = 16.86, 4 d.f.,  $\underline{P}$  < 0.005). To illustrate, 46% of 71 bowhunters were very satisfied, compared to 24% of hunters who used firearms exclusively.

Respondents who had hunted more regularly in preceding years (see question 20 of Appendix) were more likely to be satisfied in 1992 than those who hunted less often (Chisquare = 13.08, 4 d.f.,  $\underline{P}$  = 0.011). To illustrate, 62-64% of respondents who hunted more years than not and every year ( $\underline{n}$  = 87 and 225, respectively) were satisfied, compared to only 43% of 30 respondents who hunted seldomly or occasionally, combined.

Of 401 respondents, nearly half (48%) indicated that their white-tail hunting in 1992 was well worth the money spent (strongly agreed = 93 respondents or 23%, slightly agreed = 99 respondents, 25%), whereas 22% were neutral/indifferent and 30% disagreed (strongly = 51 respondents or 13%, slightly = 61 or 17%).

Of 401 respondents, 62% regarded their white-tailed deer hunting to have been "every bit as enjoyable" as expected in Alberta in 1992 (strongly so = 121 respondents, 30%;

slightly so = 128 or 32%). An additional 24% of respondents were neutral/indifferent to the statement indicated earlier, and 14% disagreed (strongly = 19, 5%; slightly = 36, 9%).

Observations of White-tailed Deer While Hunting.--Of 402 respondents, 98% reported observing white-tailed deer while hunting; 179 hunters reported seeing 21 or more deer, 87 reported 11-20, 110 reported 3-10 and 17 reported seeing 1-2 white-tails. Bowhunters (full-and part-time combined) observed relatively higher numbers of white-tails while hunting than respondents who used firearms exclusively (Chi-square = 13.25, 4 d.f.,  $\underline{P}$  = 0.01). To illustrate, 62% of 71 bowhunters reported seeing 21 or more deer, as compared to 41% of 329 hunters who used firearms.

The relative number of white-tails observed while hunting in 1992 was significantly correlated (Pearson's) with satisfaction for unsuccessful hunters ( $\underline{r}=0.320, 218 \text{ d.f.}$ ,  $\underline{P}<0.01$ ), but not for successful hunters ( $\underline{r}=0.110, 179 \text{ d.f.}$ ). To illustrate, among unsuccessful hunters, of 32 respondents who were very satisfied, 72% had seen larger numbers of white-tailed deer while hunting (16 = 21 or more, 7 = 11-20), contrasted to a minority (22%) of 18 respondents who were very dissatisfied.

Numbers of White-tailed Deer Fired Upon.--Of 400 respondents, 40% did not fire at any white-tails, 41% fired at 1, 15% fired at 2, 3% fired at 3, and 2% fired at 4 or more. The number of white-tailed deer fired upon was correlated (Pearson's) with the number seen ( $\underline{r} = 0.270$ , 398 d.f.,  $\underline{P} < 0.01$ ). Respondents who hunted alone at all times ( $\underline{n} = 78$ ) fired upon relatively fewer deer than respondents who hunted with others at least some of the time ( $\underline{n} = 322$ ). To illustrate, 54% of solitary hunters did not fire at any deer and 1% fired at 4 or more, compared to 36% and 2%, respectively, of respondents who hunted with others

(Chi-square = 10.19, 4 d.f.,  $\underline{P}$  = 0.04).

The number of white-tailed deer fired upon was <u>not</u> correlated with hunter satisfaction during 1992, for either successful or unsuccessful hunters. Most hunters shot at 2 or more white-tails, whether successful (96% of 179 respondents) or unsuccessful hunters (82% of 216) are considered.

Successful Kills of White-tailed Deer.--Of 401 respondents, 45% reported that they had personally killed a white-tailed deer in Alberta in 1992. Individual hunter success was a highly significant determinant of hunter satisfaction (Chi-square = 128.21, 12 d.f.,  $\underline{P}$  = 0.000). To illustrate, of 179 successful hunters (i.e., hunters who had killed a deer), 141 (79%) were satisfied, 31 neutral, and 7 dissatisfied, as compared to unsuccessful respondents ( $\underline{n}$  = 220), where 99 (45%) were satisfied, 78 neutral and 39 dissatisfied.

Of 320 respondents who hunted with other persons at least some of the time in 1992, 54% ( $\underline{n} = 173$ ) reported that someone successfully killed a white-tail while in their company. Hunters who had successful hunting companions were more satisfied than those whose hunting companions did <u>not</u> kill a white-tailed deer. Among respondents who did not kill deer themselves, only 74% of 94 whose companions <u>were not</u> successful were either neutral or satisfied, as compared to 90% of 72 whose companions <u>were successful</u> (Chi-square = 12.88, 4 d.f.,  $\underline{P} = 0.013$ ).

<u>Frequency of Encountering Other Hunters</u>.--Of 396 respondents to the questionnaire item on encountering too many other hunters (question 7 of Appendix), a plurality (40%) was neutral/indifferent, whereas 38% disagreed, and 22% agreed. Thus, the majority of white-tailed deer hunters did <u>not</u> feel crowded while hunting in 1992.

Perceptions of having encountered too many other deer hunters tended to be related to choice of weapons (Chi-square = 8.53, 4 d.f.,  $\underline{P}$  = 0.08). Among part-time bowhunters ( $\underline{n}$ =63), a higher proportion of respondents were neutral/indifferent (54%, vs. 37% of 325 rifle hunters and 43% of 7 full-time bowhunters) and a lower proportion <u>disagreed</u> with the suggestion that they encountered too many other hunters (24% vs. 41% and 29% for those choosing firearms and bows, respectively). The perception of too many hunters was also related to solitary vs. group hunting (Chi-square = 14.77, 4 d.f.,  $\underline{P}$  = 0.005). Respondents who hunted alone at all times ( $\underline{n}$  = 77) were more likely to agree with the perception (26%) and less likely to be neutral/indifferent (31%), as compared to those respondents ( $\underline{n}$ =318) who hunted with others at least some of the time (agree = 21%, neutral = 42%).

Perceptions of White-tailed Deer Population Trends.--Of 396 respondents, a plurality (33%) thought white-tails had increased in recent years, while 28% thought they had stayed the same, 22% perceived a decrease, and 17% didn't know.

Non-compliance with Hunting Regulations.--Of 400 respondents, 77% indicated that they did <u>not</u> have direct personal knowledge of hunting infractions that occurred in Alberta during 1992, whereas 23% ( $\underline{n}$ =93) did have such knowledge. Of the latter group, only 25% had participated in the "Report A Poacher" program during 1992.

A large majority of respondents ( $\underline{n} = 386$ ) either agreed (strongly = 32%, slightly = 22%) or were neutral (27%) to the statement that "illegal deer hunting commonly occurs in Alberta". Respondents who had not observed hunting infractions in 1992 ( $\underline{n} = 298$ ) were more likely to be neutral/indifferent to the statement (30%) and less likely to agree (51%), as compared to those respondents ( $\underline{n} = 86$ ) who did have direct personal knowledge of hunting

infractions [neutral = 19%, agree = 62% (Chi-square = 9.57, 4 d.f.,  $\underline{P}$  = 0.05)]. Other Hunting Management Considerations

Type of White-tailed Deer Sought.--Of 346 respondents, a large majority (85%) indicated that they usually preferred to take a buck, whereas 10% preferred to take the first deer that they saw (irrespective of age or sex) and 5% preferred to kill a doe or fawn.

Landowner-Hunter Interactions.--Of 399 respondents to the question on access to privately-owned lands (question 24 of Appendix), 44% regarded it as "not a problem at all", 33% chose the category "it's a bit of a problem for me"; 16% and 6% regarded it as "fairly serious" and "extremely serious", respectively. Responses to this question were affected by the choice of lands for hunting deer (question 5 of Appendix) (Chi-square = 31.63, 9 d.f.,  $\underline{P} = 0.000$ ). To illustrate, of 175 respondents who hunted mostly on privately-owned lands, 39% regarded access as "not a problem", while 37% and 20% regarded it as fairly serious and extremely serious, respectively. However, among 63 respondents who hunted on private lands, leased lands and unoccupied crown lands in roughly equal amounts, 10%, 52% and 35% regarded access as not a problem, fairly serious, and extremely serious, respectively. The corresponding figures for respondents ( $\underline{n} = 24$ ) who hunted mostly on crown lands were 4%, 54% and 42%. These findings suggest that some hunters who would preferentially hunt on privately-owned lands are being displaced to crown lands and leased public lands, because of difficulties in obtaining permission to hunt from private landowners.

Of 402 respondents, 56.5% provided suggestions on improving "hunting management to reduce crop damages by deer in areas where such damages commonly occur".

Suggestions have not been categorized as yet.

Trophy Hunting.--Nearly two-thirds (66%) of 402 respondents did <u>not</u> want an area for trophy bucks, although more than one-third (34%) <u>did</u> want a trophy area. Of 145 respondents to the question on how many Wildlife Management Units (WMUs) were wanted for trophy buck production (question 27 of Appendix), a plurality (47%) indicated 3-5 WMUs; 23% indicated 1 or 2 WMUs, 19% chose 6-10, and 12% indicated 11 or more.

<u>Variety of Licencing.</u>—A large majority of 397 respondents was either satisfied (very = 26%, slightly = 34%) or neutral (27%) when asked about the variety of hunting licences available for hunting white-tailed deer in Alberta; only 13% of respondents were dissatisfied (slightly = 9%, strongly = 4%).

#### Other Suggestions and Comments

Of 402 respondents, 55% provided suggestions on improving future hunts for white-tailed deer. Comments have not been categorized as yet, although native hunting and excessively high licence fees were issues that were mentioned fairly commonly.

#### **DISCUSSION AND CONCLUSIONS**

White-tailed deer hunters in Alberta are nearly all male (95.5%) and have considerable hunting experience, but nevertheless are somewhat younger and less experienced than moose and elk hunters. (Todd and Lynch 1992a, 1992b) Moreover, females comprise a somewhat larger proportion of white-tail hunters (4.5%), as compared to elk and moose hunters (2 and 4%, respectively--Todd and Lynch 1992a, 1992b).

Resident white-tailed deer hunters relied heavily on firearms for hunting (82% used firearms exclusively in 1992) and primarily travelled on foot while in the hunting area(s).

White-tail hunting was a sociable undertaking for most respondents, although 19% hunted alone at all times for white-tails during 1992. A plurality (42%) of respondents divided their hunting time equally among private lands, leased lands and unoccupied crown lands, although sizable numbers concentrated their white-tail hunting on privately-owned lands (29%) and unoccupied crown lands (26%), as well. Most respondents evidently secured hunting permission beforehand, when required, although 21% apparently did <u>not</u>, on a regular basis. Relatively few hunters regarded access to privately-owned lands as a significant problem to themselves (for deer hunting).

Most white-tailed deer hunters purchased white-tail licences every year, and regarded hunting white-tails as quite important to themselves. The hunting motive, "to get outdoors to enjoy nature", was very dominant among white-tailed deer hunters, followed by other appreciative motives (escape routines/release stress, practice hunting skills, solitude), companionship, and the challenge of outsmarting a game animal. Obtaining a "trophy animal" was the least important motive for hunting white-tails, although a large majority of respondents usually preferred to kill a buck.

Both longer-term and current (1992) measures of satisfaction indicate that a good majority of white-tailed deer hunters were either satisfied or neutral; relatively few respondents were dissatisfied, although responses to the question on satisfaction with money spent (question 17 of Appendix) showed somewhat less satisfaction on that criterion (this may indicate that a number of respondents regard licence fees to be high). Satisfaction of respondents (in 1992) was related to the relative number of white-tails seen while hunting, whether or not respondents had killed a white-tailed deer, and whether or not companions

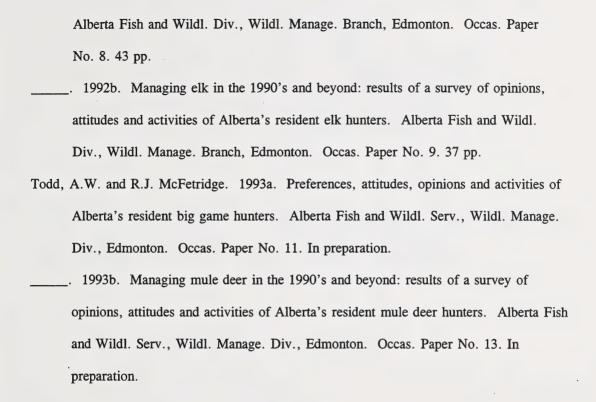
killed a deer, in the case of respondents who did not hunt alone at all times. In respect to satisfaction, and its determinants, several differences were shown among bowhunters and respondents who used firearms exclusively, among solitary and other (group) hunters, and among those who hunted regularly and those who hunted less frequently.

A majority of white-tail hunters thought that illegal deer hunting was common in Alberta. Most, however, did <u>not</u> have direct personal knowledge of hunting infractions in 1992. Of those who <u>did</u> have knowledge of infractions, only 25% had participated in the "Report A Poacher" program during 1992.

Most respondents did not want an area managed for production of trophy bucks; among those who did, most indicated that 3-5 or 1-2 Wildlife Management Units should be devoted to that purpose. Likewise, most respondents were satisfied with the existing variety of white-tailed deer hunting licences which are available to residents. Finally, in respect to trends in white-tailed deer populations, most respondents perceived deer as having increased or stayed the same in recent years. In conclusion, from the standpoint of resident hunters, it seems that relatively few adjustments are required, at this time, to the hunting management of white-tailed deer populations in Alberta.

#### LITERATURE CITED

- Dillman, D.A. 1978. Mail and telephone surveys: the total design method. Wiley, New York, N.Y. 325 pp.
- Todd, A.W. and G.M. Lynch. 1992a. Managing moose in the 1990's and beyond: results of a survey of opinions, attitudes and activities of Alberta's resident moose hunters.





Appendix: A copy of the questionnaire mailed to hunters in April 1993 (do not complete and return this questionnaire copy, it is included here only for your information).



ALBERTA FORESTRY, LANDS AND WILDLIFE FISH AND WILDLIFE DIVISION



# MANAGING WHITE-TAILED DEER IN THE 1990'S AND BEYOND: A SURVEY OF OPINIONS, ATTITUDES AND ACTIVITIES OF ALBERTA'S RESIDENT WHITE-TAILED DEER HUNTERS

#### To the Respondent:

Thank you for answering these questions about hunting white-tailed deer in Alberta. The information provided by you and other white-tailed deer hunters will be used to improve the management of deer populations, now and in the future. Please answer all of the questions which apply to you. Most questions can be answered by circling the number next to the answer you choose, or by writing in the blank space provided. If you have any questions, please call Arlen Todd in Edmonton (422-9537). You may call toll-free by using the regional information telephone enquiries (RITE) system. Just call your operator and ask to be connected with the RITE operator.

All information which you provide in this questionnaire will be kept completely confidential. The questionnaire has an identification number on it, but that number is used only for mailing purposes. That number enables us to check your name off on the mailing list when your questionnaire is returned. Otherwise, your name will never be associated with the questionnaire itself.

Please return your completed questionnaire within the next few days by folding it over <u>once</u> (in half) and placing it in the postage paid envelope provided.

We appreciate your cooperation with this survey.

### TO BEGIN, WE WANT TO KNOW WHY YOU HUNT WHITE-TAILS AND HOW IMPORTANT HUNTING THEM IS TO YOU.

1. There are a number of reasons why people hunt. Please consider the following list of reasons for hunting, and indicate how important each one is to you personally, as a reason for hunting white-tailed deer (circle one number for <u>each</u> reason).

Reason	Not At All Important	Slightly <u>Important</u>	Quite <u>Important</u>	Very <u>Important</u>
To get outdoors to enjoy nature	1	2	3	4
To put meat in the freezer	1	2	3	4
For physical exercise	1	2	3	4
To enjoy solitude	1	2	3	4
To escape everyday routines release stress	, 1	2	3	4
For the satisfaction of bagging an animal	1	2	3	4
For companionship of friend or family members	s 1	2	3	4
To practice outdoor skills (for example, camping)	1	2	3	4
For the challenge of out- smarting a game animal	1	2	3	4
To obtain a trophy animal	1	2	3	4
To use my hunting equipment	1	2	3	4
To practice hunting skills (e.g., tracking, stalking	1	2	3	4

- 2. If for some reason you could not go hunting white-tails next year, or if the season closed, how much would you miss it (please circle the number of your answer)?
  - 1 I WOULD NOT MISS IT AT ALL.
  - 2 I WOULD MISS IT A LITTLE.
  - 3 I WOULD MISS IT QUITE A LOT.
  - 4 I WOULD MISS IT MORE THAN ANY OTHER ACTIVITY OR INTEREST.

THE NEXT FEW QUESTIONS CONCERN YOUR WHITE-TAILED DEER HUNTING ACTIVITIES IN ALBERTA DURING 1992.

- Please indicate your <u>primary</u> means of travel <u>in the hunting area(s)</u>
   while you were hunting white-tails during 1992 (circle number).
  - 1 TWO-WHEEL DRIVE HIGHWAY VEHICLE
  - 2 FOUR-WHEEL DRIVE HIGHWAY VEHICLE
  - 3 ON FOOT
  - 4 HORSE
  - 5 OFF-HIGHWAY VEHICLE
  - 6 CANOE OR BOAT

7	OTHER	(PLEASE	SPECIFY)	

- 4. Which statement best describes your choice of weapons for hunting white-tailed deer in Alberta in 1992 (please circle number)?
  - 1 I HUNTED ONLY WITH BOW AND ARROW.
  - 2 I USED BOW AND ARROW <u>AND</u> FIREARMS (RIFLE, MUZZLE LOADER, SHOTGUN), TOO.
  - I HUNTED ONLY WITH FIREARMS (RIFLE, MUZZLE LOADER, SHOTGUN).



- 5. Which statement best describes your typical situation for hunting white-tails in Alberta (please circle number)?
  - 1 MOST OF MY HUNTING IS DONE ON PRIVATELY OWNED LANDS.
  - 2 I HUNT MOSTLY ON LEASED PUBLIC LANDS.
  - 3 I HUNT ON PRIVATELY OWNED LANDS, LEASED LANDS, AND UNOCCUPIED CROWN LANDS IN ROUGHLY EQUAL AMOUNTS.
  - 4 I HUNT MOSTLY ON UNOCCUPIED CROWN LANDS.

If you circled number 4 (i.e., you hunt mostly on unoccupied crown lands), please to go question number 7. Otherwise, please answer question number 6, too.

- 6. Which statement best applies to your trips for hunting white-tailed deer on private lands or leased public lands (please circle number)?
  - 1 I PLAN THE HUNT WELL AHEAD OF TIME AND OBTAIN LANDOWNER OR LEASEHOLDER PERMISSION, WHEN NECESSARY, BEFOREHAND.
  - I GET PERMISSION IF I SEE THE LANDOWNER (OR LEASEHOLDER) IN THE AREA WHERE I'M GOING TO HUNT, JUST BEFORE I GO IN.
  - I SIMPLY HEAD OUT WHEN READY AND USUALLY DON'T BOTHER WITH PERMISSION.

#### NOW, WE WANT TO KNOW ABOUT YOUR ENCOUNTERS AND EXPERIENCES WITH OTHER HUNTERS.

7. Please indicate the extent to which you disagree or agree with the following statement: During my white-tailed deer hunting in Alberta in 1992, I encountered <u>too many</u> other hunters (circle number).

Strongly				Strongly
disagree				agree
1	2	3	4	5

8.	B. Do you have direct personal knowledge	of illegal hunting acts (such
	as hunting without licence, night hunt	ing, hunting before or after
	the open season) in Alberta during 199	32 (please circle number)?

1 NO

2 YES

If no, please go to question 10. If yes, please answer question 9, too.

9. Did you participate in the "Report A Poacher" program in 1992 by reporting one or more incidents of illegal hunting (please circle number)?

1 NO

- 2 YES
- 10. Please indicate the extent to which you disagree or agree with the following statement: Illegal deer hunting commonly occurs in Alberta (circle number).

Strongly				Strongly
disagree				agree
1	2	3	4	5

NEXT, WE ARE INTERESTED IN SOME RESULTS OF YOUR WHITE-TAILED DEER HUNTING IN 1992, AND YOUR RELATIVE SATISFACTION.

11. While hunting white-tails in Alberta during 1992, the number of white-tails which you saw was.... (circle one answer only, please):

0 1-2

3-10

11-20

21 or more

<pre>12. Did you personally kill a white-ta   (circle number)?</pre>	ailed deer in Alberta during 1992
1 NO 2 YES	
13. The number of white-tailed deer wh Alberta during 1992 was(please	•
0 1	2 3 4 or more
14. Please indicate whether you always during 1992 (in Alberta) or whether other deer hunters some or all of	er you hunted in the company of
I HUNTED ALONE AT ALL TI I HUNTED WITH OTHER DEER ALL OF THE TIME.	
If you hunted alone at all times, Otherwise, please answer question	
15. Did any of the other persons that 1992 kill a white-tail while you w circle number of answer)?	
1 NO 2 YES	
16. Please indicate your relative sati deer hunting experiences in Albert	
Very	Very
dissatisfied 1 2 3	satisfied 4 5

### NEXT, PLEASE INDICATE THE EXTENT TO WHICH YOU DISAGREE OR AGREE WITH THE FOLLOWING TWO STATEMENTS.

17. My white-tailed deer hunting in Alberta in 1992 was well worth the money I spent (circle number).

Strongly				Strongly
disagree				agree
1	2	3	4	5

18. My white-tailed deer hunting in Alberta in 1992 was every bit as enjoyable as I expected it to be (circle number).

Strongly				Strongly
disagree				agree
1	2	3	4	5



NOW WE WANT TO KNOW ABOUT YOUR LONGER-TERM EXPERIENCES WITH WHITE-TAIL HUNTING AND YOUR OVERALL SATISFACTION LEVELS.

19. How many years, in your lifetime, have you been licenced to hunt white-tails anywhere (Alberta and elsewhere combined)?

\_\_\_\_\_ YEARS

If 2 years or less, please go to Question 23 at the top of page 9. If more than 2 years, please answer questions 20, 21 and 22, as well.

- 20. Please indicate relatively how often you have purchased a white-tailed deer licence in Alberta in the years since you first bought one.
  - 1 I SELDOM BUY A WHITE-TAIL HUNTING LICENCE.
  - 2 I OCCASIONALLY BUY A WHITE-TAIL LICENCE
  - 3 I BUY A LICENCE MORE YEARS THAN NOT.
  - 4 I BUY A WHITE-TAIL HUNTING LICENCE EVERY YEAR.
- 21. Which of the following statements best describes your preference for the type of white-tailed deer to kill (please circle number)?
  - I GENERALLY PREFER TO TAKE THE FIRST DEER THAT I SEE, WHETHER IT'S A BUCK, DOE, OR FAWN.
  - 2 I GENERALLY PREFER TO KILL A DOE OR FAWN.
  - 3 I USUALLY PREFER TO TAKE A BUCK.
- 22. Please indicate your overall satisfaction with your white-tail hunting experiences in Alberta <u>during the past few years</u> that you have hunted (circle number).

Very dissatisfied Satisfied 1 2 3 4 5

23.	In your	opinion, in	the area(s)	where you hunt, have white-tai	i 1
	numbers	in the last	few years	(please circle number)	

- 1 DECREASED?
- 2 STAYED THE SAME?
- 3 INCREASED?
- 4 DON'T KNOW.

NOW, WE WANT YOUR OPINIONS ON A FEW OTHER ASPECTS OF THE MANAGEMENT OF WHITE-TAILED DEER POPULATIONS.

- 24. Quite a lot of white-tailed deer hunting in Alberta is done on privately-owned lands. Please indicate the extent to which you regard gaining access to privately-owned lands as a problem for you, as a white-tailed deer hunter (circle number).
  - 1 IT'S NOT A PROBLEM AT ALL.
  - 2 IT'S A BIT OF A PROBLEM FOR ME.
  - 3 IT'S A FAIRLY SERIOUS PROBLEM.
  - 4 IT'S AN EXTREMELY SERIOUS PROBLEM.
- 25. One of the challenges for deer managers is to balance the needs of landowners against the needs and interests of hunters. As an example, increased deer numbers can result in significant damages to landowners' crops in some areas. Hunting is one means of minimizing such damages. Do you have any suggestions on how we could improve hunting management to reduce crop damages by deer in areas where such damages commonly occur? This would have to be done, of course, in such a way that individual farms were not over-run by hunters, or landowner-hunter relations could get worse. If you have any suggestions, please write in the space provided.

	•		

- 26. Alberta has been known to produce some large, trophy-class bucks in the past. In our experience, today, a limited-entry draw is the best way to ensure that trophy bucks are available. Please indicate whether you think a relatively small area should be set aside for trophy bucks or not (circle number).
  - 1 NO, I DON'T WANT A TROPHY AREA.
  - YES, I DO WANT AN AREA FOR TROPHY BUCKS.

If you do <u>not</u> want an area for hunting trophy bucks (i.e., you circled number 1, above), please go to question number 28.

Otherwise, please answer question number 27, too.

- 27. Please indicate roughly how many wildlife management units should be managed for trophy white-tails (circle number of answer).
  - 1 ONE OR TWO
  - 2 THREE TO FIVE
  - 3 SIX TO TEN
  - 4 ELEVEN OR MORE
- 28. Please indicate the extent to which you are dissatisfied or satisfied with the variety of hunting licences available to you for hunting white-tailed deer in Alberta (circle number).

Very				Very
dissatisfied				Satisfied
1	2	3	4	5

THE LAST QUESTIONS WILL PROVIDE INFORMATION WHICH WILL HELP US INTERPRET YOUR QUESTIONNAIRE RESPONSES.

29. Please indicate your present age, in years (write in space provided).

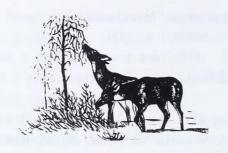
YEARS

30. Please indicate your sex (circle number).



- 1 MALE
- 2 FEMALE

se use this space for that purpose.					
AND TRAINER AND LOW- 18 TO LOW-					
Manager Barrier 87/1 area services					
	25				



THANK YOU. PLEASE RETURN YOUR COMPLETED QUESTIONNAIRE TODAY, USING THE RETURN ENVELOPE PROVIDED. Please fit the questionnaire booklet in the envelope by folding the booklet over once (in half). In the event that the pre-addressed envelope has been lost, please mail the questionnaire to the following address:

Alberta Fish and Wildlife Division
Attention: Arlen Todd
7th Floor
0.S. Longman Building
6909 - 116 Street
Edmonton, Alberta T6H 4P2

IF YOU WOULD LIKE TO RECEIVE A SUMMARY OF THE SURVEY RESULTS, PLEASE PRINT YOUR NAME AND MAILING ADDRESS ON THE BACK OF THE RETURN ENVELOPE (NOT ON THE QUESTIONNAIRE ITSELF) AND PRINT "YES" ON THE FRONT COVER OF THE QUESTIONNAIRE BOOKLET, IN THE LOWER RIGHT-HAND CORNER. WE WILL SEE THAT YOU GET THE SUMMARY.





